AMENDMENT

In the Specification

Please amend the specification as follows:

Please replace the paragraph beginning at page 2, line 17, with the following paragraph:

One of the difficulties with dynamic routing schemes is that it greatly complicates identification of failure points in the network. Failure points are also referred to as rejection points. Since the route for a particular connection cannot be predicted beforehand, it typically is necessary to use a trace mechanism to determine the actual route used. Although path and connection trace mechanism can identify the route being taken, it cannot be effectively used for troubleshooting, because the number of connection setup messages will overload the network due to the sheer size of the TTL (time to live) IE (information element).

Please replace the paragraph beginning at page 22, line 15, with the following paragraph:

The formatting of a general information element as defined by standard Q.2931 is shown in FIGURE 8. The format includes an 8-bit information element identifier 44, a 1-bit extension 46, a 2-bit coding standard 48, and a 5-bit IE instruction field 50 including a 1-bit flag 52, a 1-bit resource 54, an a 3-bit IE action indicator 56. The format also includes a 16-bit length of contents of the IE field 58, and provides additional space of variable length for the contents of the IE in a field 60. IE instruction field [[52]] 50 is only interpreted in case of unexpected information elements, an unrecognized information element identifier, or information elements with unrecognized content.

Please replace the paragraph beginning at page 23, line 13, with the following paragraph:

The logic for implementing one embodiment of the invention is shown in FIGURE 10. The process starts in a block 110, in which a debug IE is embedded in a data packet, such as a connection-management message. Preferably, the debug IE will be formatted in accord with the format of FIGURE 9, although other formats may be used as well, The contents of the IE may comprise only a [[view]] few bits, or may comprise several bits or bytes of data, depending on the type and identification of the switching devices that are desired to be diagnosed. For instance, the IE content field may contain information that instructs each switching device supplied by a particular vendor (or multiple vendors if a common multi-vendor scheme is adapted) to activate its diagnostic functions, or a particular diagnostic function. In other embodiments, the debug IE could include information identifying switching equipment within a selected peer group(s) to debug, or along a particular path segment(s) to debug, as explained below.